AMENDMENTS TO THE CLAIMS

- 1. (Currently amended) A genetically engineered cDNA of the rat *bcl-x* gene, which has at least one substitution selected from the substitutions that change residues 22 Tyr to Phe, residues 26 Gln to Asn and residues 165 Arg to Lys, in the coding region of rat *bcl-x* cDNA of SEQ ID NO: 1 comprises a nucleotide sequence of SEQ ID NO: 1 except having at least one nucleotide substitution which changes, in the amino acid sequence encoded by SEQ ID NO: 1, Tyr at amino acid residue 22 to Phe, Gln at amino acid residue 26 to Asn, and Arg at amino acid residue 165 to Lys.
- **2.** (Original) The genetically engineered cDNA of claim 1, which is attached at its 5'- end with an oligonucleotide encoding a protein-transduction-domain peptide.
- 3. (Original) The genetically engineered cDNA of claim 2, wherein the oligonucleotide encodes the amino acid sequence of SEQ ID NO: 12 or 13.
- **4.** (Currently amended) A recombinant vector carrying comprising the genetically engineered cDNA of claim 1.
- 5. (Currently amended) A cell into which An isolated cell comprising the recombinant vector of claim 4 was introduced.
- 6. (Withdrawn) An improved protein produced by the genetically engineered cDNA of claim 1, which has at least one amino acid substitution in SEQ ID NO: 2, which amino acid substitution is selected from the substitutions of residues 22 Tyr to Phe, residues 26 Gln to Asn and residues 165 Arg to Lys.

Attorney Docket No. 2002_0256A Serial No. 10/049,822 April 26, 2006

- 7. (Withdrawn) The improved protein of claim 6, which is attached at the N-terminal with a protein-transduction-domain peptide.
- 8. (Withdrawn) The improved protein of claim 7, wherein the protein-transduction-domain peptide is an oligopeptide having the amino acid sequence of SEQ ID NO: 12 or 13.
- 9. (Currently amended) A recombinant vector carrying comprising the genetically engineered cDNA of claim 2.
- 10. (Currently amended) A recombinant vector carrying comprising the genetically engineered cDNA of claim 3.
- 11. (Currently amended) A cell into which An isolated cell comprising the recombinant vector of claim 9 was introduced.
- 12. (Currently amended) A cell into which An isolated cell comprising the recombinant vector of claim 10 was introduced.
- 13. (Currently amended) An isolated polynucleotide comprising the nucleotide sequence of SEQ ID NO: 1, said SEQ ID NO: 1 except having at least one nucleotide substitution which changes, in the amino acid sequence encoded by SEQ ID NO: 1, Tyr at amino acid residue 22 to Phe, Gln at amino acid residue 26 to Asn, Arg at amino acid residue 165 to Lys, or a combination thereof.
- 14. (Previously presented) The polynucleotide of claim 13, which is attached at its 5'-end with an oligonucleotide encoding a protein-transduction-domain peptide.

- 15. (Previously presented) The polynucleotide of claim 14, wherein the oligonucleotide encodes the amino acid sequence of SEQ ID NO: 12 or 13.
- **16.** (**Previously presented**) A recombinant vector comprising the polynucleotide of claim 13.
- 17. (Currently amended) A cell into which An isolated cell comprising the recombinant vector of claim 16 was introduced.
- 18. (Withdrawn) An isolated polypeptide comprising the amino acid sequence of SEQ ID NO: 2, said SEQ ID NO: 2 having at least one amino acid substitution selected from the group consisting of substitution of Tyr at amino acid residue 22 to Phe, substitution of Gln at amino acid residue 26 to Asn and substitution of Arg at amino acid residue 165 to Lys.
- 19. (Withdrawn) The polypeptide of claim 18, which is attached at the N-terminal with a protein-transduction-domain peptide.
- **20.** (Withdrawn) The polypeptide of claim 19, wherein the protein-transduction-domain peptide is an oligopeptide comprising the amino acid sequence of SEQ ID NO: 12 or 13.
- 21. (Previously presented) A recombinant vector comprising the polynucleotide of claim 14.
- 22. (Previously presented) A recombinant vector comprising the polynucleotide of claim 15.

Attorney Docket No. 2002_0256A Serial No. 10/049,822 April 26, 2006

- 23. (Currently amended) A cell into which An isolated cell comprising the recombinant vector of claim 21 was introduced.
- 24. (Currently amended) A cell into which An isolated cell comprising the recombinant vector of claim 22 was introduced.
- 25. (Withdrawn) The polypeptide of claim 18, wherein said SEQ ID NO: 2 has an amino acid substitution selected from the group consisting of substitution of Tyr at amino acid residue 22 to Phe, substitution of Gln at amino acid residue 26 to Asn, substitution of Arg at amino acid residue 165 to Lys and a combination thereof.